CALIFORNIA WATER BOARDS
State Water Resources Control Board
Regional Water Quality Control Boards

Water Board Function: Stormwater regulation

Water Board Program(s) Relevant to Function:
NPDES-Stormwater
- Municipal
- Industrial
- Construction

[Details on each sub-program provided in subsequent function sheets.]

Problem/Issue Description:
Urban runoff can cause pollution and hydromodification impacts (physical impacts to water bodies and their surrounding landscape).

Overview of Function:
Regulates the point source discharges of stormwater using Federal Clean Water Authority. The program has three, sub-programs: municipal, industrial, and construction. There are statewide general permits for the industrial and construction programs as well as a statewide municipal permit for small communities (and some others). The medium and large (>100K) municipalities are generally issued Regional, countywide permits.

Role of Water Board Staff:
Write permits, review reports and plans, inspect facilities, take appropriate enforcement, conduct outreach/training, and participate in regionally significant research and technology forums.

Role of Regional Board Members:
[Please see subsequent sub-program function sheets.]

Role of State Board Members:
[Please see subsequent sub-program function sheets.]

Primary Issues of Concern:
Hydromodification, emerging pollutants, monitoring and performance measures, enforcement.

Definition of Key Terms:
None.

CALIFORNIA WATER BOARDS
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Water Board Function: Regulating municipal storm water discharges

Water Board Program(s) Relevant to Function:
NPDES Stormwater – Municipal

Problem/Issue Description:
The discharge of pollutants in storm water and dry weather flows from municipal discharges if not regulated can be a significant source of pollutants discharged to surface waters.

Overview of Function:
The Storm Water Program is a subset of the National Pollutant Discharge Elimination System (NPDES) General Permit permitting program. The Storm Water Program consists of three components: municipal, industrial and construction. The goal of the Municipal Storm Water Program is to reduce the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. Unlike NPDES industrial wastewater permits which typically contain specific end-of-pipe effluent limits based on water quality standards or available treatment technology, MS4 permits usually include programmatic requirements involving the implementation of best management practices (BMPs) in order to reduce pollutants discharged to the MEP. The management programs specify what best management practices (BMPs) will be used to address certain program areas. For example, programs include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations. In addition, the permittees often are allowed flexibility in the types of BMPs and activities implemented to meet permit requirements. The Municipal Storm Water Program is divided into two separate Phases.

Under Phase I, which started in 1990, the Regional Water Quality Control Boards have adopted NPDES storm water permits for medium (serving between 100,000 and 250,000 people) and large (serving 250,000 people) municipalities. Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. These permits are reissued as the permits expire.

There is one statewide Phase I MS4 permit issued by the State Water Board, the Caltrans Statewide Storm Water Permit that regulates the discharges from Caltrans' roads, highways, and other facilities (roadside rest areas, maintenance yards, etc.).

As part of Phase II, the State Water Board adopted a General Permit for the Discharge of Storm Water from Small MS4s (WQ Order No. 2003-0005-DWQ) to provide permit coverage for smaller municipalities, including non-traditional Small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes.

Role of Water Board Staff:
The majority of the resources in this program are at the Regional Water Boards. Regional Water Board staff write the Phase I permits, conduct compliance program evaluations, and review and recommended approval by the Regional Board Members of Storm Water Management Plans (SWMPs). Regional Water Board staff conducts inspections, investigate complaints, and take enforcement actions for non-compliance. Regional Board staff processes enrollment requests and passes them along to State Board staff that handles the enrollment.

State Water Board staff support the program by writing and re-issuing the Phase II and Caltrans General Permit for consideration and adoption by the State Board, and implement administrative tasks such as public noticing Phase II SWMPs. State Water Board staff also participate in the "research team" when petitions are submitted to the State Water Board.

Role of Regional Board Members:
General permit: May be involved in compliance assurance and enforcement of statewide permits.

Phase I MS4 and individual permits: Conduct public hearing, consider and adopt orders and permits, taking into consideration any issues involving the capture and use of stormwater.

Role of State Board Members:
General permit: Direct State Board staff, conduct public hearings, and consider and adopt permits.

Phase I MS4 and individual permits: Direct State Board staff, conduct public hearings, consider and adopt orders and permits, taking into consideration any issues involving the capture and use of stormwater. Reviews petitions from Regional Board adoption of permits.

Primary Issues of Concern:
The major issues of concern are that storm water permits are becoming more complex and controversial with increased litigation. New and revised permit requirements must translate waste load allocations from adopted Total Maximum Daily Loads (TMDLs), as required by law. There is also a growing recognition that atmospheric deposition can be a significant source of pollutants in storm water and urban runoff, adding to the complexities of regulating sources and the need for collaboration with other Cal EPA agencies, such as the Air Resources Board. Specific issues of concern for Phase I and Phase II, as well as the nexus issues between the 401 Water Quality Certification and Municipal Storm Water Program, are listed below:

Phase I MS4 Permits – Nine Regional Water Boards have adopted 26 Phase I MS4 permits that regulate discharges from approximately 300 cities, counties, and special districts. Specific Phase I permit concerns are:

- Inconsistency in permits (i.e., prescriptive vs. non prescriptive permit format, low impact develop/hydromodification language)
- Use of MEP pollutant removal or water quality based compliance standards
- Blue-Ribbon Panel Report findings and the principles regarding the purpose and use of Action Levels in permits
- Programmatic costs

Phase II MS4 General Permit – There are about 190 small MS4s designated by Regional Water Boards, which are cities, counties, or special districts.

- Permit expires April 2008
- Administrative challenges for State and Regional Water Boards (i.e., review and approve SWMPs and process NOI/fees)
- Programmatic costs
- Definition of MEP

Wetlands – New Development language from municipal storm water permits now being added to 401 Water Quality Certifications.

Definition of Key Terms:

MS4: Municipal Separate Storm Sewer System

MEP: Maximum Extent Practicable is the standard of compliance used in the CWA's storm water provisions for municipal storm water permits

BMP: Best management practices

MAL: Municipal Action Level proposed in the Draft Ventura MS4 permit

NOI: Notice of Intent

SWMP: Storm Water Management Plan

CALIFORNIA WATER BOARDS
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Water Board Function: Regulating industrial stormwater discharges

Water Board Program(s) Relevant to Function:
NPDES Stormwater – Industrial

Problem/Issue Description:
The discharge of pollutants in storm water and dry weather flows from industrial facilities (e.g., auto dismantlers, manufacturing plants, etc.) are largely untreated and can be a significant source of pollutants discharged to surface waters.

Overview of Function:
The Storm Water Program is a subset of the NPDES permitting program. The Storm Water Program consists of three components: municipal, industrial, and construction. The goal of the Storm Water Program is to reduce/eliminate the discharge of pollutants in storm water and dry weather flows from urban, construction, and/or industrial environments.

The State Board has adopted the "General Industrial Storm Water Permit," or the Industrial General Permit (IGP), which regulates the discharge of storm water associated with industrial activities for about 9,500 industrial facilities. This permit regulates the discharge of storm water from ten broad categories of industry that are defined by the federal regulations, but does not include commercial facilities such as retail gasoline stations.

Role of Water Board Staff:
The majority of the resources in this program are at the Regional Water Boards. Regional Water Board staff conduct compliance evaluation (conduct inspections, review annual reports, etc.), investigate complaints, and take enforcement actions for non-compliance. State Water Board staff support the program by administering the program (enrollment, change of information, etc.), developing new and improved business processes and database functions, and reissuing the statewide IGP every 5-8 years.

Role of Regional Board Members:
Conduct public hearings, and consider and adopt orders and permits, taking into consideration any issues involving the capture and use of stormwater. May be involved in compliance assurance and enforcement of statewide permits.

Role of State Board Members:
Administer public hearings, and consider and adopt orders and permits, taking into consideration any issues involving the capture and use of stormwater. Reviews petitions from Regional Board adoption of permits.

Primary Issues of Concern:
The primary issue currently is the role of numeric action levels (NALs) and numeric effluent limitations (NELs) in the IGP.

Also, new legislation requires the State and Regional Water Boards to regulate facilities that handle pre-production plastic pellets, also known as nurdles, beginning in January 2009. Nurdles can be as small as one millimeter and are easily windblown or carried away in runoff where they wind up in the environment. They are a source of pollutants in surface waters and beaches and the ocean. [AB 258 (Chapter 735, Statutes of 2007].

The next, revised IGP requirements must translate waste load allocations from adopted Total Maximum Daily Loads (TMDLs), as required by law.

There is also a growing recognition that atmospheric deposition can be a significant source of pollutants in storm water and urban runoff, adding to the complexities of regulating sources and the need for collaboration with other Cal EPA agencies, such as the Air Resources Board.

Definition of Key Terms:

IGP: Industrial General Permit

BAT/BCT: Best Available Technology / Best Conventional Technology Economically Achievable - a narrative standard used in combination with BMP requirements to serve as a surrogate for numeric effluent limitations.

BMP: Best management practices

NAL: Numeric action levels – when placed in a permit NALs serve as benchmarks, or triggers for some sort of action, like further implementation of BMPs or reporting. Exceedance of an NAL does not result in a direct violation.

NEL: Numeric effluent limitations – when placed in a permit an NEL (either derived as water-quality or technology based) sets a limit on the effluent which, if exceeded, results in a violation of the permit.

Non-filer: An entity who is required by law to file for coverage under the IGP but has yet to do so.

CALIFORNIA WATER BOARDS
State Water Resources Control Board
Regional Water Quality Control Boards

Water Board Function: Regulating construction stormwater discharges

Water Board Program(s) Relevant to Function:
NPDES Stormwater - Construction

Problem/Issue Description:
The discharge of pollutants in storm water and dry weather flows from construction activities that result in a land disturbance of one acre or more are largely untreated and can be a significant source of pollutants discharged to surface waters.

Overview of Function:
The Storm Water Program is a subset of the NPDES permitting program. The Storm Water Program consists of three components: municipal, industrial, and construction. The goal of the Storm Water Program is to reduce/eliminate the discharge of pollutants in storm water and dry weather flows from urban, construction, and/or industrial environments.

The State Board has adopted the "General Construction Storm Water Permit," or the Construction General Permit (CGP), which regulates the discharge of storm water associated with construction activities that result in a land disturbance of one acre or more. There are currently about 20,000 active construction permittees under this permit. The State Board also regulates construction activities associated with small linear construction projects (those disturbing less than five acres of land) under the "General Permit for Small Linear Underground/Overhead Projects", or the Small LUP GP. Linear projects include activities such as the installation of fiber optic cables, laying of gas or water line, and burying of electric lines. There are 87 construction activities that are being regulated through this permit.

Role of Water Board Staff:
The majority of the resources in this program are at the Regional Water Boards. Regional Water Board staff conduct compliance evaluation (conduct inspections, review reports, etc.), investigate complaints, and take enforcement actions for non-compliance. State Water Board staff support the program by administering the program (enrollment, change of information, etc.), developing new and improved business processes and database functions, and reissuing the statewide CGP and Small LUP GP every 5-8 years.

Role of Regional Board Members:
Conduct public hearings, and consider and adopt orders and permits, taking into consideration issues involving the capture and use of stormwater. May be involved in compliance assurance and enforcement of statewide permits.

Role of State Board Members:
Administer and conducts public hearing, and consider and adopt orders and permits, taking into consideration of issues involving the capture and use of stormwater. Reviews petitions form Regional Board adoption of permits.

Primary Issues of Concern:
Primary issues include the role of numeric action levels (NALs) and numeric effluent limitations (NELs) in the construction stormwater monitoring and performance strategy, new-development and re-development performance standards for construction projects, public participation and transparency, and the balance between prescriptive permit conditions and discharger flexibility.

Definition of Key Terms:

CGP: Construction General Permit

Small LUP Permit: General Permit for Small Linear Underground/Overhead Projects

BAT/BCT: Best Available Technology/Best Conventional Technology Economically Achievable - a narrative standard used in combination with BMP requirements to serve as a surrogate for numeric effluent limitations.

BMP: Best management practices

NAL: Numeric action levels – when placed in a permit NALs serve as benchmarks, or triggers for some sort of action, like further implementation of BMPs or reporting. Exceedance of an NAL does not result in a direct violation.

NEL: Numeric effluent limitations – when placed in a permit an NEL (either derived as water-quality or technology based) sets a limit on the effluent which, if exceeded, results in a violation of the permit.

Non-filer: An entity who is required by law to file for coverage under the CGP but has yet to do so.